

REMARKS

Claims 1-18, 24, 25, 30 and 37 are pending in this patent application. Claims 1, 14, 15, 30 and 37 are currently amended. Claims 2-13, 16-18, 24 and 25 are original. Claims 19-23, 26 and 27 are withdrawn. Claims 28, 29, 31-36 and 38-54 were cancelled.

This submission is in response to the supplemental office action mailed May 20, 2004. Although not expressly stated by the Examiner in the action, we understand that this supplemental office action supercedes the office action mailed April 9, 2004 and resets the deadline for response, as set forth under the rules. We understand further that this supplemental office action was issued as a result of a telephone interview initiated with the Examiner by the undersigned on May 12, 2004, to make note that the office action mailed April 9, 2004 was defective in that all consideration of claims 10 to 13 had been omitted and that the objection to claims 14 and 15 referenced and relied upon the omitted consideration of claims 10. Issue of a replacement office action, resetting the deadline for response, was requested. Verbal agreement was reached.

Claims 1-9, 16-18, 25, 30, and 37 stand rejected under 35 U.S.C. 103(a) as being obvious and therefore unpatentable over Lombardi et al. U.S. 4,103,518 in view of Ploch et al. U.S. 3,837,943. Claim 24 stands rejected under 35 U.S.C. 103(a) as being obvious and therefore unpatentable over Lombardi et al. '518 in view of Ploch et al. '493, and further in view of Callaway U.S. 5,520,022. Claims 10-13 stand rejected under 35 U.S.C. 103(a) as being obvious and therefore unpatentable over Lombardi et al. '518 in view of Ploch et al. '943, and further in view of Richards et al. U.S. 5,557,950. Claims 14 and 15 stand rejected under 35 U.S.C. 103(a) as being obvious and therefore unpatentable over Lombardi et al. '518 in view of Ploch et al. '943 and Richards et al. '950, and further in view of Wood et al. U.S. Patent Application No. 2002/0124365 A1. We respectfully traverse.

Applicants' invention, as now more clearly claimed, is a double-face velour fabric article comprising a knitted fabric body having a technical face, formed by a filament stitch yarn, and a

technical back, formed by a filament loop yarn, the knitted fabric body having a velour surface formed at both the technical back and the technical face. According to the invention, the filament stitch yarn comprises heat sensitive material that responds to application of heat during processing to increase tortuosity of air flow paths through the knitted fabric body formed by interstices defined among the filament stitch yarn and the filament loop yarn of the knitted fabric body. As a result, the knitted fabric body has permeability of about $80 \text{ ft}^3/\text{ft}^2/\text{min}$ or less under a pressure difference of $\frac{1}{2}$ inch of water across the knitted fabric body. None of the prior art references, whether taken alone, or in any proper combination, teaches or suggestions Applicants' invention as now more clearly claimed.

In particular, as acknowledged by the Examiner in the Office action mailed September 26, 2003, Lombardi et al. '518 "fails to teach using heat sensitive material to form the stitch yarn used in its process for producing a terry knit fabric."

The Examiner proposes to find suggestion for the missing feature of a knitted fabric formed of a stitch yarn comprising heat sensitive material in Ploch et al. '943. Even if there is proper basis for combining Lombardi et al. '518 and Ploch et al. '943 (which Applicants do not concede), Ploch et al. '943 provides no teaching nor suggestion for a knitted fabric body having a technical face and a technical back formed by knitting together a filament stitch yarn and a filament loop yarn, the filament stitch yarn comprising heat sensitive material that responds to application of heat during processing to increase tortuosity of air flow paths through the knitted fabric body formed by interstices defined among the filament stitch yarn and the filament loop yarn, thereby to form the knitted fabric body with permeability of about $80 \text{ ft}^3/\text{ft}^2/\text{min}$ or less under a pressure difference of $\frac{1}{2}$ inch of water across the knitted fabric body. Rather, Ploch et al. '943 (with reference to Ploch et al. U.S. 3,168,883) describes a pile product in which yarns laid upon a ground cloth are sewn to the ground cloth, e.g. with a multi-needle sewing machine, using heat shrinkable thread to achieve a very tight seam (Ploch et al. '888, col. 1, line 61 to col. 2, line 2).

In response to arguments that Ploch et al. '943 is distinguished by stitching two fabric layers together, the Examiner argues that Ploch et al. '943 does not disclose stitching two fabric layers together. We respectfully disagree, noting that in Ploch et al. '943, with reference to the FIGURE of Ploch et al. '883, a layer of pile-forming yarns 2 are laid upon a ground cloth 1 and the layer of yarns and the ground cloth are then joined together by seams 3. To similar effect is the description at col. 1, lines 24-28 of quilt stitch binding "between the base fabric and the overlying yarns or fleece..." The reference to a Malimo machine is also consistent with this description. All are in direct contrast to the fabric article described and claimed by Applicants, where the stitch yarn and loop yarn are joined together during knitting to form a knitted fabric body. We submit further that the sewing process of Ploch et al. '943 does not result in interlocking of the sewing yarn and the loop yarn in a manner consistent with proper use of that term in connection with stitch and loop yarns joined by knitting to form a knitted fabric body.

Finally, we note that Ploch et al. '943 describes their process "as effecting the formation of the bulky seam" (col. 2, lines 3-4), rather disclosing creation of a bulkier fabric, as suggested and relied upon by the Examiner in the rejection.

We also respectfully disagree with the Examiner's characterization of claims 5-9 as being merely method limitations. Rather, the limitations at issue, e.g. "said heat sensitive material responds to application of heat at about 212°F to about 450°F applied for about 2 minutes to about 60 minutes" (claim 9), characterize structural elements, i.e. the heat sensitive material of the filament stitch yarn of different embodiments of the fabric article of Applicants' invention.

Obviousness can only be established by combining or modifying the teaching of the prior art where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. (See M.P.E.P. §2143.01) Motivation cannot come from the invention itself. (See, e.g., Heidelberg Druckmaschinen AG v. Hantscho Commercial Products, Inc., 21 F.3d 1068, 1072 (Fed. Cir. 1993). Nor can *prima facie* obviousness be established by "using hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988).

Absent impermissible application of hindsight, with Applicants' invention as a guide, the teaching of Ploch et al. '943 for a seam of heat shrinkable, or meltable, material for attaching a layer of yarns upon an existing ground cloth provides no teaching or suggestion for Applicants' invention of a knitted fabric body in which the filament stitch yarn, knitted together with the filament loop yarn to form a knitted fabric body, includes a heat sensitive material, which, upon application of heat, increases the tortuosity of air flow passages among the knitted-together stitch and loop yarns to improve the dynamic insulation performance of the knitted fabric body, as described by Applicants in the instant application. The motivations postulated by the Examiner ("to help increase the bond between the ground cloth and the pile yarn and produce a stable and wear resistant compound fabric" and to create "stronger bonds between the loop yarns and the base layer" and to create "a bulkier fabric" [addressed above]) do not provide the requisite suggestion of combining the references in a manner to achieve Applicants' invention, as now claimed.

Similarly, none of the other references cited by the Examiner in combination with Lombardi et al. '518 and Ploch et al. '943, whether taken alone, or in any proper combination, teaches or suggests Applicants' invention, as now more clearly claimed.

In particular, Callaway '022 describes a tacking or wiping cloth formed with textured yarns (col. 1, line 66). There is no teaching or suggestion of Applicants' invention of a knitted fabric body in which the filament stitch yarn, knitted together with the filament loop yarn to form the knitted fabric body, includes a heat sensitive material, which, upon application of heat, increases the tortuosity of air flow passages among the knitted-together stitch and loop yarns to improve the dynamic insulation performance of the knitted fabric body, the knitted fabric body having permeability of about $80 \text{ ft}^3/\text{ft}^2/\text{min}$ or less under a pressure difference of $\frac{1}{2}$ inch of water across the knitted fabric body. In fact, as mentioned above, Callaway '022 is directed to a tack or wiping cloth, for which dynamic insulation performance is not a consideration, nor do the motivations postulated by the Examiner ("add bulk to the pile and ground yarns making the fabric look and feel bulkier and softer") provide the requisition suggestion of combining the prior art references in a manner to achieve Applicants' invention, as claimed.

Richards et al. '950 describes a plush fabric with elastic yarns interknitted with ground and pile yarns to provide a fabric with a degree of stretchability (col. 2, lines 3-5). Again, there is no teaching or suggestion of Applicants' invention of a knitted fabric body in which the filament stitch yarn, knitted together with the filament loop yarn to form the knitted fabric body, includes a heat sensitive material which, upon application of heat, increases the tortuosity of air flow passages among the knitted-together stitch and loop yarns to improve the dynamic insulation performance of the knitted fabric body, the knitted fabric body having permeability of about $80 \text{ ft}^3/\text{ft}^2/\text{min}$ or less under a pressure difference of $\frac{1}{2}$ inch of water across the knitted fabric body. Again, the motivations postulated by the Examiner ("to make the fabric more stretchable and thus more comfortable to the user" and to "give the fabric uniform stretch in various direction") do not provide the requisite suggestion of combining the prior art references in a manner to achieve Applicants' invention, as claimed.

Wood et al. '365 describes a loop pile fabric for a wiping cloth with improved particle pick-up, achieved, at least in part, by impinging a flow of high pressure fluid to tease apart the fiber loops, causing the previously parallel fibers to splay apart and become non-parallel, so the loops become expanded and bulky (paragraph 0023). There is, however, no teaching, nor suggestion, in Wood et al. '365 of Applicants' invention for entangling raised fibers, including in and/or through interstices of the knitted fabric body, thus to further increase the tortuosity of air flow paths and improve dynamic insulation performance. Furthermore, there is again no teaching or suggestion of Applicants' invention of a knitted fabric body in which the filament stitch yarn, knitted together with the filament loop yarn to form the knitted fabric body, includes a heat sensitive material which, upon application of heat, increases the tortuosity of air flow passages among the knitted-together stitch and loop yarns to improve the dynamic insulation performance of the knitted fabric body, the knitted fabric body having permeability of about $80 \text{ ft}^3/\text{ft}^2/\text{min}$ or less under a pressure difference of $\frac{1}{2}$ inch of water across the knitted fabric body. Finally, similar to Callaway '022, Wood et al. '365 is directed to a wiping cloth, for which dynamic insulation performance is not a consideration, nor, again, do the motivations postulated by the Examiner ("produce a patterned surface which is aesthetically pleased to the consumer") provide the

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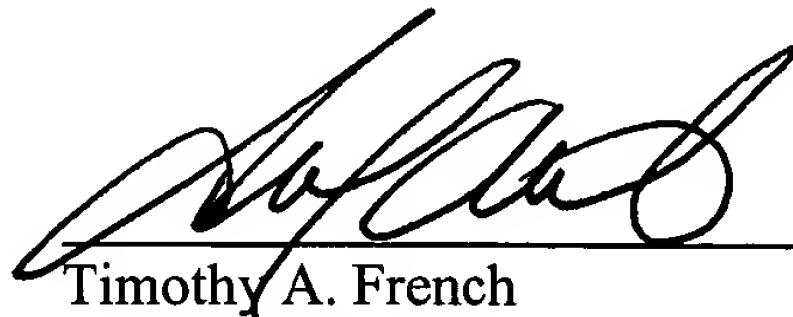
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requisition suggestion of combining the prior art references in a manner to achieve Applicants' invention, as claimed.

Applicants submit that this application is now in condition for allowance. Early favorable action is solicited. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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